

Abstract:

Actuation Unit for an Electromechanically Actuated Disc Brake

An actuating unit is provided for an electromechanically actuated disc brake for automotive vehicles, which is disposed on a brake caliper wherein two friction linings (4, 5) respectively cooperating with a side face of a brake disc (6) are arranged in a manner displaceable to a limited extent, with one (4) of said friction linings (4, 5) being arranged so as to be directly movable into engagement with the brake disc (3) by means of an actuating element (7), through the actuating unit, while the other friction lining (5) is movable into engagement with the brake disc (3) through the action of a reaction force applied by the brake caliper. The actuating unit comprises an electric motor (10) and at least one reduction gear (2) operatively arranged between the electric motor (10) and the first friction lining (4). The reduction gear (11) is formed as a threaded drive which, for guiding the threaded nut (16), includes a cylindrical guide piece (20) that is provided with a sensor device (43, 43a) for sensing the reaction force.

To realize a design suitable for large series production, the invention discloses that the guide piece (20) has a reduced thickness of material or an aperture (48, 48a) in the area of attachment of the sensor device (43), and a prefabricated sensor module (50) that allows testing outside the guide piece (20) and forms the sensor device (43) is arranged in the area of attachment or within or above the aperture (48, 48a).

(Figure 1)